

AMENDMENTS TO THE SPECIFICATION

Amend the paragraph commencing at page 17, line 13 as follows:

The HDD 15 is provided with a measure to prevent emergency unloading according to the present invention, ~~and is disconnected and is connected~~ with the system bus 10 through the HDC 26. The HDC 26 carries out format control of a magnetic disk mounted to the HDD 15, and also serves as a host interface and an HDD interface. The sensor 16 includes a group of sensors required by a car navigation system for autonomous traveling, and for example includes a vehicle speed sensor and a gyro sensor. The sensor 16 is connected with the system bus 10 through the interface 18. The interface 18 is supplied with the output of the GPS receiver 17, and hybrid traveling control based on the GPS-measured position and autonomous traveling is carried out.

Amend the paragraph commencing at page 21, line 16 as follows:

The driver inserts the engine key in the LOCK position to release the lock, and turns the key to the ACC position (I). Thus, the ACC power supply rises for example to 12V, and the key is then turned to the ST position (III) through the ON position (II), which starts the starter-motor and voltage ~~rises falls~~ both on the backup power supply line 251 and the ACC power supply line 252. After a prescribed time period, the engine starts (IV), and the ACC power supply line 252 and the backup power supply line 251 rise ~~gain again~~ to the original voltage value 12V, and a steady state is regained. Note that the time period between the ACC position, the start of the starter-motor and the start of the engine is random. Here, in order to make sure that the emergency unloading is avoided, the engine start position (the position IV) needs only be detected, and then an activation instruction may be given to the HDD.

Therefore, the engine start detecting circuit 303 monitors if the voltage value on the ACC power supply line 252 exceeds the level of a prescribed threshold value SL through the voltage value monitoring circuit 301. If it exceeds the threshold value SL, the engine key has come to the position of ACC, and it is then monitored whether or not the engine is provided with a power supply. More specifically, the engine start detecting circuit 303 monitors the voltage value on the backup power supply line 251 through the voltage value monitoring circuit 301. It is monitored whether or not the voltage value on the backup power supply line 251 is lower than the prescribed threshold value SL. Here, it may be possible to monitor

whether or not the two power supply lines, the backup power supply line 251 and the ACC power supply line 252 are both below the prescribed threshold value SL, while monitoring only the ACC power supply line 252 does not allow the start of the engine to be surely detected. This is because the engine key may be returned to the position of the key LOCK from the ACC position. Therefore, after the backup power supply line 251 becomes higher than the prescribed threshold value SL, the backup power supply line 251 or the two power supply lines, the backup power supply line 251 and the ACC power supply line 252 must be monitored.

Amend the paragraph commencing at page 35, line 4 as follows:

The driver inserts the engine key in the LOCK position to release the lock, and turns the key to the ACC position (I). Thus, the ACC power supply rises for example to 12V, and the key is then turned to the ST position (III) through the ON position (II), which starts the starter-motor and voltage rises falls both on the backup power supply line 251 and the ACC power supply line 252. After a prescribed time period, the engine starts (IV), and the voltages on the ACC power supply line 252 and the backup power supply line 251 rise again to the original voltage value 12V, and a steady state is regained. Note that the time period between the ACC position, the start of the starter-motor and the start of the engine is random.

Amend the paragraph commencing at page 37, line 21 as follows:

Then, when the engine key is turned to the ST position (III) to start the starter-motor, the voltages on the backup power supply line 251 and the ACC power supply line 252 both rise-fall by the voltage dropped state described above. When the voltage values are lower than the prescribed threshold level SL, the voltage value monitoring circuit 301 can detect its monitoring voltage being lower than the prescribed threshold level SL. Thus, during the period from (III) to (IV), when the voltage values on the backup power supply line 251 and the ACC power supply line 252 are lower than the prescribed threshold level SL, the time point at which these voltage values once again exceed the threshold level SL is detected, and the start of the engine can be detected. At the time, the HDD can be activated in the engine start timing (IV). Therefore, in this case, the HDD activation by monitoring using the timer is

not carried out.

Amend the paragraph commencing at page 38, line 23 as follows:

As described above, according to the embodiment, the timing of activating the HDD varies depending upon the voltage level at a momentary shutoff. If the voltage value at a momentary shutoff is greater-smaller than the threshold level (such as the voltage value in Fig. 13A), the HDD is activated at the point (timing IV) when the engine start is detected based on the voltage value. Meanwhile, if the voltage value at a momentary shutoff is smaller-greater than the prescribed threshold level SL, the HDD is activated when the timer LSI 14 counts a prescribed time period. Thus, the movement of the magnetic head 51 is controlled to prevent emergency unloading.